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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0140679 A1**
Wen (43) **Pub. Date: Oct. 3, 2002**(54) **KEYPAD APPARATUS AND METHOD FOR
INPUTTING DATA AND CHARACTERS FOR
A COMPUTING DEVICE OR CELLULAR
PHONE****Publication Classification**(51) **Int. Cl.⁷** **G09G 5/00**
(52) **U.S. Cl.** **345/168; 345/169**(76) **Inventor: Tai Chun Wen, Santa Clara, CA (US)**(57) **ABSTRACT**

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A keypad and key device featuring a plurality of contacts on the rear face of a keypad key that each mate with an individual contact pad from a plurality of contact pads placed below the upwardly biased and tiltable keys. Pushing a key on a right side or left side mates different pairs of contacts and contact pads generating different characters for input to a cellular phone or small computer. Pushing the key in the center will generate a third character by mating both contacts with both contact pads. The keys may also have more than two contacts mating with more than two contact pads and tilt to a variety of positions to mate the respective contacts with contact pads. Consequently, one depression of a key enables any one of a plurality of characters assigned thereto to be inputted which is effective in accelerating a data inputting process.

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